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In this period, the 80% SMYS pressure effect on the wrinklebend criteria was evaluated, considering (a) extend the wrinklebend criteria to cover a maximum pressure cycle of 80%, and (b) develop field verification results to establish the validity of the proposed wrinklebend criteria. The results indicate that in comparison to a maximum pressure of 72% SMYS, the fatigue damage increases and the service life decreases for a wrinkle when the maximum cyclic pressure is 80% SMYS. To date, all results from field samples strongly support the proposed wrinklebend criteria.